IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

--1. (Cancelled)

2. (Currently Amended) A remote management system for managing serial devices having a serial interface and servers having keyboard, video, and mouse ("KVM") interfaces comprising:

a computer workstation including a keyboard, cursor control device and video display;

at least one remote ~~device~~ server including ~~a keyboard, a video, and a mouse~~ ("KVM") interface;

at least one remote serial device including a serial user interface;

a remote management unit coupled to said workstation and containing at least a KVM interface for connecting to said at least one remote ~~device~~ server, and a serial interface for directly connecting to said at least one remote serial device;

~~first~~ communication means for providing bi-directional communication between said remote management unit and said workstation; and

~~second communication means for providing bi-directional communication between said remote management unit and said at least one remote device or said at least one remote serial device~~;

wherein said remote management unit enables switching ~~of~~ said ~~second~~ communications to and from said computer workstation ~~means~~ between said ~~remote management unit and said~~ (KVM)

interface ~~of said at least one remote device or~~ and said serial user interface ~~of said least one remote serial device~~.

3. (Previously Presented) A system according to claim 2, wherein said workstation controls a power source of at least one of said at least one remote device or one of said at least one remote serial device through said remote management unit.

4. (Currently Amended) A system according to claim 2, wherein access to said remote management unit by said workstation is controlled by unique user passwords or authentication information.

5. (Previously Presented) A system according to claim 2, wherein said remote management unit includes at least one redundant power supply.

6. (Previously Presented) A system according to claim 2, wherein said remote management unit includes at least one option menu circuit.

7. (Currently Amended) A system according to claim 6, wherein said option menu circuit produces a multi-window ~~an~~ option menu including at least a remote server window, ~~identification of said at least one remote device~~, a power control window, and a ~~and said at least one~~ remote serial device window.

8. (Currently Amended) A system according to claim 2, wherein said remote management unit includes at least one header circuit for selective communication between at least one KVM port of said remote management unit and at least one video port of said at least one remote ~~device~~ server.

9. (Previously Presented) A system according to claim 8, wherein said header circuit includes a video switch, and at least one receiver transmitter circuit, wherein said receiver transmitter circuit converts parallel and serial signals.

10. (Previously Presented) A system according to claim 2, wherein said remote management unit includes at least one frame grabber circuit for digitizing video signals.

11. (Previously Presented) A system according to claim 10, wherein said frame grabber circuit converts analog video signals to digital video signals.

12. (Previously Presented) A system according to claim 2, wherein said remote management unit includes a frame grabber circuit for correcting an image produced by said video signals.

13. (Previously Presented) A system according to claim 2, wherein said remote management unit includes at least one local KVM port.

14. (Previously Presented) A system according to claim 2, wherein said remote management unit includes at least one video processor circuit for compressing video signals.

15. (Previously Presented) A system according to claim 14, wherein said video processor circuit includes at least one video receiving circuit for receiving video signals from at least one CPU.

16. (Previously Presented) A system according to claim 14, wherein said video processor circuit includes at least one pixel pusher circuit for storing red, green and blue video signal components of said video signals.

17. (Previously Presented) A system according to claim 15, wherein said video processor circuit includes at least one frame buffer circuit for storing video frames indicative of said video signals.

18. (Previously Presented) A system according to claim 14, wherein said video processor circuit compresses video signals using Joint Bi-level Image experts Group (JBIG) compression.

19. (Previously Presented) A system according to claim 15, wherein said video processor circuit includes at least one microprocessor for controlling at least one of a frame buffer circuit, pixel pusher circuit and JBIG compression.

20. (Previously Presented) A system according to claim 19, wherein said video processor circuit includes at least one memory circuit coupled to said microprocessor for storing data.

21. (Previously Presented) A system according to claim 14, wherein said video processor circuit includes at least one switch for outputting video signals.

22. (Previously Presented) A system according to claim 2, wherein said remote management unit includes at least one modem module for demodulating signals received by a modem.

23. (Currently Amended) A system according to claim 2, wherein said ~~first or second~~ communication means is selected from the group consisting of a LAN, a WAN, a wireless connection, a modem, a direct modem connection, and the Internet.

24. (Previously Presented) A system according to claim 2, wherein said remote management unit includes reset circuitry controllable by said workstation for resetting said remote management unit.

25. (Currently Amended) An apparatus for coupling a workstation to one or more remote ~~devices~~ servers and one or more remote serial devices, said apparatus comprising:

a communication circuit for transmitting signals to and receiving signals from said workstation via a communication medium;

a serial communication circuit for transmitting serial data to and receiving serial data signals from one or more of said remote serial devices;

a keyboard, video, mouse ("KVM") circuit for transmitting and receiving KVM signals from one or more of said remote ~~devices~~ servers; and

a central processing circuit for controlling transmission of said signals between at least one said communication circuit, said serial communication circuit and said KVM circuit.

26. (Currently Amended) An apparatus according to claim 25, wherein said one or more remote ~~devices~~ servers and said one or more remote serial devices are powered by power sources.

27. (Currently Amended) An apparatus according to claim 26, wherein said apparatus is connected to said power sources for said one or more remote server and one or more remote serial device.

28. (Currently Amended) An apparatus according to claim 27, wherein said workstation controls said one or more remote server and one or more remote serial device power sources through said apparatus.

29. (Currently Amended) An apparatus according to claim 28, wherein access to said apparatus by said workstation is controlled by unique user passwords or authentication information.

30. (Previously Presented) An apparatus according to claim 25, wherein said apparatus includes at least one redundant power supply.

31. (Previously Presented) An apparatus according to claim 25, wherein said apparatus includes at least one option menu circuit.

32. (Currently Amended) An apparatus according to claim 31, wherein said option menu circuit produces a multi-window ~~an~~ option menu including at least a remote server window, a power control window, and a ~~identification of said remote devices and said~~ remote serial devices window.

33. (Currently Amended) An apparatus according to claim 25, wherein said apparatus includes at least one header circuit for selective communication between at least one KVM port and at least one video port of said remote ~~devices~~ servers.

34. (Previously Presented) A apparatus according to claim 33, wherein said header circuit includes a video switch, and at least one receiver transmitter circuit, wherein said receiver transmitter circuit converts parallel and serial signals.

35. (Previously Presented) An apparatus according to claim 25, wherein said apparatus includes at least one frame grabber circuit for digitizing and correcting images produced by video signals.

36. (Previously Presented) An apparatus according to claim 35, wherein said frame grabber circuit converts analog video signals to digital video signals.

37. (Previously Presented) An apparatus according to claim 25, wherein said apparatus includes at least one local KVM port.

38. (Previously Presented) An apparatus according to claim 25, wherein said apparatus includes at least one video processor circuit for compressing video signals.

39. (Previously Presented) An apparatus according to claim 38, wherein said video processor circuit includes at least one circuit to receive video signals from said central processing circuit.

40. (Previously Presented) An apparatus according to claim 39, wherein said video processor circuit includes at least one pixel pusher circuit for storing red, green and blue video signal components of said video signals.

41. (Previously Presented) An apparatus according to claim 38, wherein said video processor circuit includes at least one frame buffer circuit for storing video frames indicative of said video signals.

42. (Previously Presented) An apparatus according to claim 38, wherein said video processor circuit compresses video signals using JBIG compression.

43. (Previously Presented) An apparatus according to claim 38, wherein said video processor circuit includes at least one memory circuit for use by a microprocessor for controlling at least one of a frame buffer circuit, pixel pusher circuit and JBIG compression.

44. (Previously Presented) An apparatus according to claim 38, wherein said video processor circuit includes at least one switch for outputting signals to an Ethernet port or a modem port.

45. (Previously Presented) An apparatus according to claim 25, wherein said apparatus includes at least one modem module for demodulating signals received by modem.

46. (Previously Presented) An apparatus according to claim 25, wherein said communication medium is at least one selected from the group consisting of a LAN, a WAN, a wireless connection, a modem, a direct modem connection, and the Internet.

47. (Previously Presented) An apparatus according to claim 25, wherein said signals transmitted and received by said workstation are at least one control signal selected from the group consisting of keyboard, video, mouse, serial or power.

48. (Previously Presented) An apparatus according to claim 25, wherein said apparatus includes a reset circuit for resetting said apparatus.